A NEW SPECIES OF THE GENUS ANGILIA FROM THE PHILIPPINES, WITH A CATALOGUE OF THE DESCRIBED SPECIES

(Hemiptera: Veliidae)

C. J. Drake² and H. Hoberlandt²

The genus Angilia was erected by Carlos Stål (1865, p. 46) for the reception of Velia albidocincta Stål (1855, p. 46) from Kaffraria, Cape Colony Africa. Since then, seven other species and one variety have been described from Africa.

The present paper contains the description of a new species of *Angilia* from the Philippine Islands, and is the first record of the genus in the East Indies. The fine illustrations of the new species were made by Mrs. Ludvik Hoberlandt of Praha. In order to facilitate work in the group, a catalogue with bibliographic references and distributional records of the species is appended.

Angilia (Adriennella) philippiensis Drake and Hoberlandt (Figure 1)

Macropterous Male: Rather broad, two and one-half times as long as wide. General color yellowish brown with some areas shaded darker; hemelytra chocolate brown with white markings. Dorsal surface with brownish or golden pubescence and also some very fine, rather short, erect, inconspicuous, brownish hairs. Legs pale testaceous with dark brown markings.

Size: Length, 4.25 mm.; width across humeral angles, 2.01-2.05 mm.

Head: Width across eyes, 1.10 mm. Head brown, paler beneath, very short, strongly deflexed in front of eyes and as seen from dorsal aspect with only about one-third of its length extending in front of anterior margins of the eyes; length of head and width of vertex equal (40:40). Eyes moderately large, semiglobular, excerted, dark brown or fuscous, shining. Rostrum pale brown with terminal segment blackish, reaching to apical third of mesosternum. Antennae (fig. 2) long ,slender, dark brown with basal segment lighter, shortly pilose, with some longer hairs on first segment; segment I moderately stout, considerably thicker than II, slightly bowed; II rather slender, a little thicker than next two; III and IV linear; formula—I, 61; II, 64; III, 85; IV, 72.

Thorax: Pronotum (figs. 1 & 3) very large, distinctly longer on median line than width across humeral angles (204:162), transversely convex between humeral angles, coarsely and irregularly pitted as may be seen in fig. 1, distinctly divided between humeral angles by a sharp wavy bicolor demarcation clearly separating anterior and posterior parts of pronotum; anterior part yellowish brown with both sides on anterior fifth somewhat darkened; median carina feebly represented, only on anterior fifth, the sides from humeral angles distinctly narrowed anteriorly and practically straight; front margin slightly

¹ Iowa State College, Ames, Iowa.

² Narodni Museum, Praha II, Czechoslovakia.

roundly emarginate, extending laterally scarcely beyond middle of the eyes; hind part dark brown, sharply narrowed posteriorly, somewhat triangularly in outline with sides slightly sinuate and apical part prolonged with apex blunt and rounded. Sternum dark fuscous brown, here and there toning into reddish brown. Plural dark fuscous brown with some bluish lustre.

Legs moderately stout, with hind femora a little stouter than in other pairs, testaceous with dark brown markings, clothed with short pubescence and longer hairs, the hairy vesture pale in the pale areas and dark in darkened areas; middle and hind femora as well as anterior tibiae moderately curved; coxae and trochanters pale in all legs. Anterior legs as in fig. 4; femora pale testaceous with apical third dark brown; tibiae testaceous with base; apex

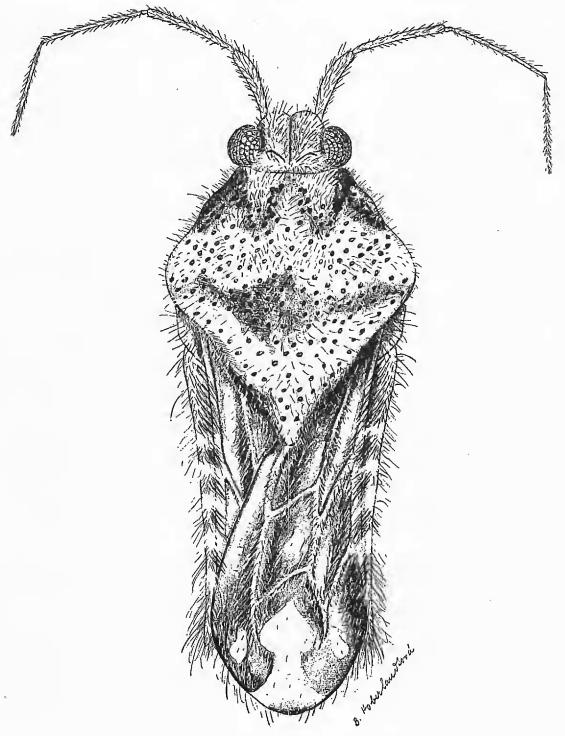
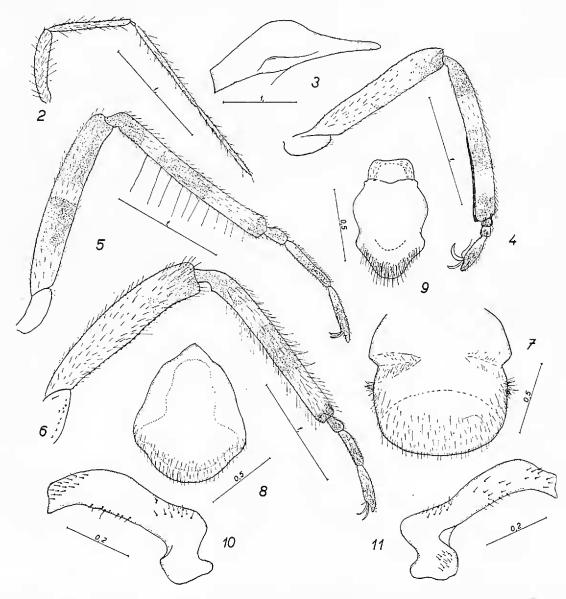


Fig. 1. Angilia (Adriennella) philippiensis, dorsal aspect.

and a wide band near the middle dark brown, with apical comb composed of very small pegs and occupying half of the entire tibial length; tarsi dark brown, feebly paler at joints between segments; formula—femora, 120; tibiae, 122; tarsal segments, I, 6; II, 9; III, 30. Middle legs as in fig. 6; femora testaceous with apical part and a wide band just in front of middle dark brown; tibiae with a narrow basal part, a large band at middle and narrow apical part dark brown; tarsi very long, dark brown, the second segment basally and apically and the third basally somewhat testaceous; formula—femora, 148; tibiae, 149; tarsal segments, I, 15; II, 49; III, 46. Hind legs as in fig. 7; femora (also trochanters) armed beneath with numerous short dark teeth, similar in color and markings as in middle legs; formula—femora, 148; tibiae, 146; tarsal segments, I, 12; II, 15; III, 37.

Abdomen: Length as measured on outer margin of connexivum, 2.51 mm., tergites brown. Venter pale brown, strongly arched, space between segments



Figs. 2-11. Angilia (Adriennella) philippiensis, Fig 2, antenna; fig. 3, disc of pronotum (lateral aspect); fig. 4, front leg; fig. 5, middle leg; fig. 6, hind leg; fig. 7, eighth abdominal segment (dorsal aspect); fig. 9, anal conus; figs. 10 & 11, parameres (paratype).

and spiracles darkened, second and third tergites carinate on median line, fifth and sixth segments each with a shallow pit on median line, seventh tergite slightly depressed posteriorly, spiricles with some whitish tomentum, pubescence and longer hairs golden brown. Connexivum yellowish, posterior angles of seventh tergite brown; beneath with a pale reddish stripe running solidly from the second to the end of the seventh tergite. Eighth abdominal segment (fig. 7) somewhat cylindrical, slightly narrowed apically, laterally deeply notched, with long bristles on apical margin. Ninth abdominal segment (fig. 8) strongly widened towards the apex, the posterior margin broadly rounded. Parameres (figs. 10 and 11) similar in shape, apically and subapically narrowed, sinuate, with apex distinctly bent and markedly prolonged on inner side; lower part, middle and apical parts with bristles.

Hemelytra reaching to apex of abdomen, chocolate brown with veins darker, an elongate spot in basal exterior cell, a small oval spot in middle cell, a very large spot (constricted near the middle) in apical part of membrane, and sometimes a small irregular spot on each side of the latter white. Veins and membrane of cells sparsely clothed with short appressed golden pubescence.

Holotype (macropterous male), San Jose, Mindoro, Philippine Islands, March, 1945, collected by F. S. Skinner; in the California Academy of Sciences. *Paratype* (macropterous male), same locality as type, April, 1945, E. S. Ross. Units of measure employed in the description may be converted into millimeters by dividing by 80.

Differs from A. (Adriennella) schoutendeni Poisson by the distinctly less arched disc of pronotum, lateral notches on the eighth abdominal segment of the male and differently formed parameres. Size and coloration of the two species are also quite different.

Catalogue of the Described Species of Angilia Genus Angilia Stål, 1855

Type, Velia albidocincta Stål, 1855

1865. Angelia Stål, Hem. Afr., 3:167.

1942. Angilia Poisson, Rev. Zool. Bot. Afr., 36 (2): 154.

Subgenus Angilia Poisson, 1942

Type, Velia albidocincta Stål, 1855

1. Angilia aeterna Hoberlandt

1946. Angilia aeterna Hoberlandt, Acta Soc. Ent. Cechosl., 43 (1-2): 55-58, figs. 1-2.

1951. Angilia aeterna Hoberlandt, Bul. Inst. Fr. Afr. noire, 13 (4): 1131. DISTRIBUTION: South Sahara, Dahomey.

2. Angilia albidocincta (Stål)

1855. Velia albidocincta Stål, Ofv. Vet. Ak. Forh., 1:46.

1865. Angilia albidocincta Stål, Hem. Afr., 3:46.

1942. Angilia albidocincta Poisson, Rev. Zool. Bot. Afr., 36 (2): 154–157, figs. 6–9.

DISTRIBUTION: Cape Colony (Kaffraria), Uganda, South Ethiopia, Ivory Coast.

3. Angilia congoensis Poisson

1950. Angilia congoensis Poisson, Rev. Zool. Bot. Afr., 43 (1-2): 82-83, fig. 16.

DISTRIBUTION: Belgian Congo (Boma).

4. Angilia dubia Poisson

1942. *Angilia dubia* Poisson, Rev. Zool. Bot. Afr., 36 (2): 157–159, figs. 10–12..

DISTRIBUTION: Belgian Congo (Elisabethville).

5. Angilia kenyalis Poisson

1950. Angilia kenyalis Poisson, Rev. Zool. Bot. Afr., 43 (1-2): 81-82, fig. 15. DISTRIBUTION: Kenya.

Subgenus Adriennella Poisson, 1942

Type, A. Andriennella Poisson, 1942

6. Angilia conradsi Poisson

1950. Angilia conradsi Poisson, Revfl Zool. Bot. Afr., 43 (1-2): 83, fig. 17. DISTRIBUTION: Belgian Congo (Victoria Nyanza).

7. Angilia perplexa Poisson

1950. Angilia perplexa Poisson, Rev. Zool. Bot. Afr., 36 (2): 159–161, figs. 13–15.

DISTRIBUTION: Belgian Congo (Lembo).

8. Angilia philippiensis Drake and Hoberlandt

1953. Angilia philippiensis Drake and Hoberlandt, Pan-Pacific Ent., 29 (4): 223-227, figs. 1-11.

DISTRIBUTION: Philippine Islands (Mindoro).

9. Angilia schoutedeni Poisson

1942. Angilia schoutedeni Poisson, Rev. Zool. Bot. Afr., 36 (2): 161-164, figs. 16-19.

DISTRIBUTION: Belgian Congo (Lembo, Leopoldville).

9a. A. schoutedeni form camelus Poisson

1950. Angilia schoutedeni f. camelus Poisson, Rev. Zool. Bot. Afr., 43 (1-2): 84, fig. 19.

DISTRIBUTION: French Congo (Lambarene).

Errata: The following should be inserted at the foot of page 121 (vol. 29) of the preceding issue, in Dr. Gressitt's description of the genus Neodownesia. Prothorax slightly broader than long, arched anteriorly, parallel-sided, distinctly margined laterally; densely and deeply sculptured. Scutellum longer than broad, narrowed apically. Elytra long, slightly broader than prothorax basally, widened in middle, narrowed and rounded apically; each elytron with three raised costae, two rows of punctures in each of first three interstices and three or four rows in last. Intercoxal process of prosternum large, somewhat swollen; intercoxal process of mesosternum meeting metasternum at midpoint of middle coxae. Femora short and stout; tarsi broad, as long as tibiae.